ABSTRACT OF THE DISCLOSURE

The technique of the present invention extracts a plurality of blocks from a master image, processes image data corresponding to each block by orthogonal transform, compares coefficients of adjoining blocks with each other, and modifies the order of magnitude of the coefficients, based on bit information to be embedded. The bit information to be embedded is constructed as a basic pattern, which is generated, for example, by the density pattern method. The basic pattern is embedded in image data iteratively. The process of iteratively embedding the basic pattern enhances the resistance against various attacks. The technique of embedding a digital watermark in a transformed master image may not require labor-consuming management to keep master images closed to the public.